

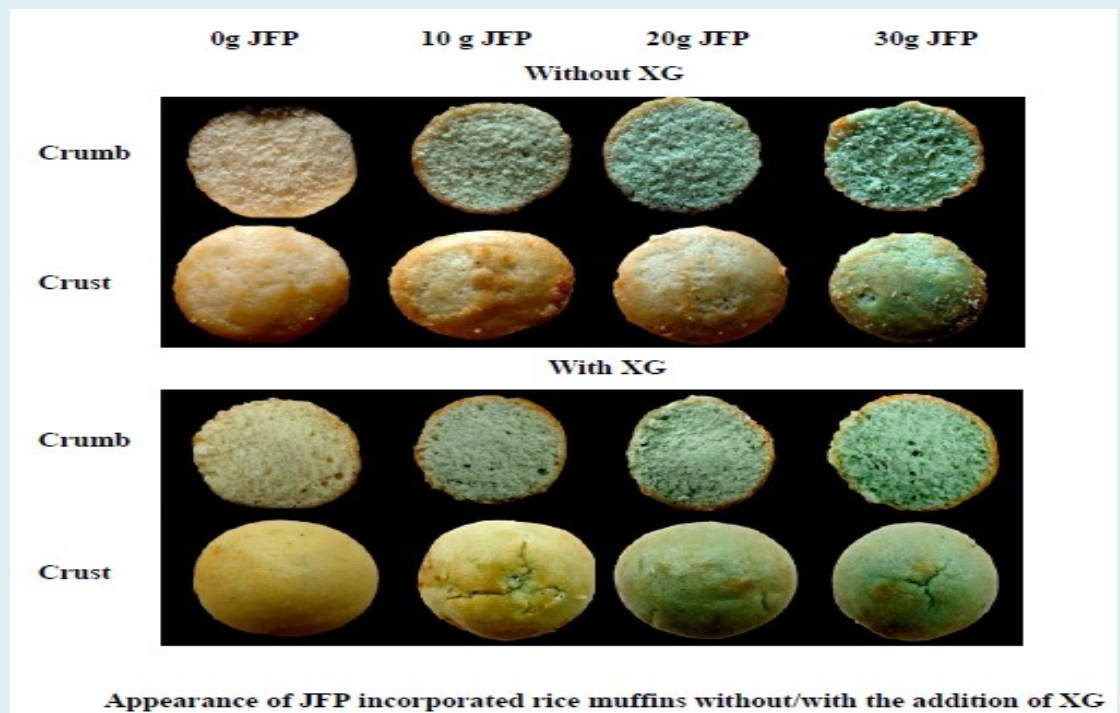
Gluten-free Muffins, Cookies, Noodles and Chapattis

Salient features

- Eggless, anti-oxidant rich, gluten-free rice Muffins using mung bean flour, Jambolin fruit pulp, xanthan gum, black carrot fibre concentrate, enzymes (transglutaminase, Amylase and glucose-oxidase) and 2 varieties of cowpea.
- Firm, springy, cohesive and chewy Muffins.
- Gluten-free Cookies from bengal gram, rice, mung bean flours and guar gum.
- Gluten-free Noodles from potato, corn and mung bean starches
- Gluten-free Chapattis from different non-gluten flours (rice, corn, chickpea and buckwheat), xanthan gum and α -amylase

Advantages

- ✓ Gluten-free products, safe for celiac patients.
- ✓ Rich in anti-oxidants.
- ✓ Higher dietary fibre content due to incorporation of black carrot fibre concentrate.
- ✓ Addition of enzymes and protein isolates increased the visco-elasticity of rice batter and appearance of muffin.
- ✓ Addition of cowpea protein isolates improved muffin-making properties of rice flour
- ✓ Guar gum and xanthan gum influenced the pasting properties of the starches, and cooking properties of the noodles
- ✓ Blending of non-gluten flours improved the sensory qualities of chapattis.



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<p><i>More information</i></p>	<p>Status of commercialization / Patent / Publications</p> <p>Publications</p> <p>Singh, J., Kaur, A., Shevkani, K., Singh, N. 2015. Influence of jambolan (<i>Syzygium cumini</i>) and xanthan gum incorporation on the physicochemical, antioxidant and sensory properties of gluten-free eggless rice muffins. <i>International Journal of Food Science and Technology</i>, 50: 1190-1197.</p> <p>Shevkani, K., Kaur, A., Kumar, S., Singh, N. 2015. Cowpea protein isolates: Functional properties and application in gluten-free rice muffins. <i>LWT-Food Science and Technology</i>, 63: 927-933.</p> <p>Kaur, A., Shevkani, K., Singh, N., Sharma, P., Kaur, S. 2015. Effect of guar gum and xanthan gum on pasting and noodle-making properties of potato, corn and mung bean starches. <i>Journal of Food Science and Technology</i>, 52: 8113-8121.</p> <p>Singh, J.P., Kaur, A., Singh, N. 2016. Development of eggless gluten-free rice muffins utilizing black carrot dietary fibre concentrate and xanthan gum. <i>Journal of Food Science and Technology</i>.</p> <p>Kaur, A., Shevkani, K., Ghumman, A., Dua, N. and Singh, N. 2014. Effect of guar gum, xanthan gum and α-amylase on rheological and chapatti making properties of rice flour. Poster presented in XXIII Indian Convention of Food Scientists and Technologists, NIFTEM, Kundli, Haryana. Dec. 13-14.</p>